

FORM PTO-1449	Atty. Docket No.: U11.12-0161	Appl. No.: 10/801,940
<p>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</p> <p>OCT 11 2005</p>	First Named Inventor:	
	Kang-Hyun Baek	
	Filing Date	Group Art:
	March 16, 2004	2873

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
JA						
JB						
JC						
JD						
JE						
JF						
JG						

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
JH						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

JI	"Notification of Transmittal of the International Search Report and the Written Opinion of the International Search Authority for PCT/US2005/007569.
JJ	
JK	
JL	
JM	
JN	
JO	
JP	
JQ	

EXAMINER:

B. Healy

DATE CONSIDERED:

12/02/05

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IA						
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FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
II						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

II	"High-Resolution Particle Separation by Sedimentation Field-Flow Fractionation", by F. Yang et al., <u>JOURNAL OF COLLOID AND INTERFACE SCIENCE</u> , Vol. 60, No. 3, July 1, 1977, pgs. 574-577.
IJ	"Synthetic Opals Made by the Langmuir-Blodgett Method", by M. Bardosova et al., <u>PREPARATION AND CHARACTERIZATION, ELSEVIER SEQUOIA, NL</u> , Vol. 437, No. 1-2, August 1, 2003, pgs. 276-279.
IK	"A Three-Dimensional Optical Photonic Crystal", by S. Lin et al., <u>JOURNAL OF LIGHTWAVE TECHNOLOGY</u> , Vol. 17, No. 11, November 1999, pgs. 1944-1947.
IL	"Invitation to Pay Additional Fees/Communication Relating to the Results of the Partial International Search for PCT/US2005/007569.
IM	
IN	
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IQ	


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EA						

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
EB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Buit</i>	EC	S. Noda, K. Tomoda, N. Yamamoto, A. Chutinan, "Full three-dimensional photonic bandgap crystals at near-infrared wavelengths", <i>Science</i> , vol. 289, pp. 604-606, Jul., 2000.
<i>Buit</i>	ED	Y.A. Vlasov, X.-Z. Bo, J.C. Sturm, D.J. Norris, "On-chip natural assembly of silicon photonic bandgap crystals", <i>Nature</i> , vol. 414, pp. 289-293, Nov., 2001.
<i>Buit</i>	EE	G.H. Bogush, M.A. Tracy, C.F. Zukoski IV, "Preparation of monodisperse silica particles: Control of size and mass fraction", <i>J. Non-Crystalline Solids</i> , vol. 104, pp. 95-106, 1988.
<i>Buit</i>	EF	S.L. Chen, P. Dong, G.-H. Yang, J.-J. Yang, "Characteristic aspects of formation of new particles during the growth of monosize silica seeds", <i>Journal of Colloid and Interface Science</i> , vol. 180, pp. 237-241, 1996.
<i>Buit</i>	EG	W. Stober, A. Fink, E. Bohn, "Controlled growth of monodisperse silica spheres in the micron size range", <i>J. Colloid and Interf. Sci.</i> , vol. 26, pp. 62-69, 1968.
<i>Buit</i>	EH	D.W. McComb, B.M. Treble, C.J. Smith, R.M. De La Rue and N. P. Johnson, "Synthesis and characterization of photonic crystals", <i>J. Mater. Chem.</i> , vol. 11, pp. 142-148, 2001.
<i>Buit</i>	EI	P. Ni, P. Dong, B. Cheng, X. Li, D. Zhang, "Synthetic SiO ₂ opals", <i>Adv. Mater.</i> vol. 13, pp. 437-441, Mar. 2001.
<i>Buit</i>	EJ	P. Jiang, J.F. Bertone, K.S. Hwang, V.L. Colvin, "Single-crystal colloidal multilayers of controlled thickness", <i>Chem. Mater.</i> , vol. 11, pp. 2132-2140, 1999.
<i>Buit</i>	EK	C.F. Blanford, R.C. Schroden, M. Al-Daous, A. Stein, "Tuning solvent-dependent color changes of three-dimensionally ordered macroporous (3DOM) materials through compositional and geometric modifications", <i>Adv. Mater.</i> , vol. 13, pp. 26-29, Jan., 2001.

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FA						

FOREIGN PATENT DOCUMENTS

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FB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SWT</i>	FC	E. Yablonovich, Inhibited spontaneous emission in solid state physics and electronics, Phys. Rev. Lett., Vol. 58, pp. 2059-2062, 1987.
<i>SWT</i>	FD	O. Painter, J. Vuckovic, A. Yariv, A. Scherer, J. D. O'Brien, P. D. Dapkus, Two dimensional photonic band gap defect mode laser, Science, Vol. 284, pp. 1819-1821, 1999.
<i>SWT</i>	FE	E. R. Brown, O. B. McMahon, High zenithal directivity from a dipole antenna on a photonic crystal, Appl. Phys. Lett., vol. 68, pp. 1300-1302, 1996.
<i>SWT</i>	FF	B. Temelkuran, M. Bayindir, E. Ozbay, R. Biswas, M. M. Sigalas, G. Tuttle, K. M. Ho, Photonic crystal-based resonant antenna with a very high directivity, J. Appl. Phys., Vol. 87, pp. 603-605, 2000.
<i>SWT</i>	FG	J. G. Fleming, S-Y. Lin, Three dimensional photonic crystal with a stop band from 1.35 to 1.95 μ m, Optics Lett., vol. 24, pp. 49-51, 1999.
<i>SWT</i>	FH	Special Section on Electromagnetic Crystal Structures, Design, Synthesis, and Applications, Journal of Lightwave Technology, Vol. 17, pp. 1944-1947, 1999.
<i>SWT</i>	FI	Special issue of Advance Materials, Vol. 13, no 6, pg. 369, 2001.
<i>SWT</i>	FJ	Special Feature Section on Photonic Crystal Structures and applications, IEEE J. Quantum Electronics, Vol 38, July 2002. Dimensional photonic
<i>SWT</i>	FK	S. John, K. Busch, Photonic bandgap formation and tunability in certain self organizing systems, Journal of Lightwave Technology, vol. 17, pp. 1931-1943, 1999.
<i>SWT</i>	FL	E. Palacios-Lidon, A. Blanco, M. Ibasate, F. Mesequer, C. Lopez, J. Sanchez-Dehesa, Optical study of the full photonic band gap in silicon inverse opals, Appl. Phys. Lett. Vol. 81, no. 21, pp. 4925-4927, 2002.

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GA						

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
GB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Bwt	GC	B. T. Holland, C. F. Blanford, A. Stein, Synthesis of Highly Ordered Three-Dimensional Mineral Honeycombs with Macropores, Science, Vol. 281, pp. 538-540, 1998.
Bwt	GD	H. Yan, C. F. Blandford, B. T. Holland, W. H. Smyrl, A. Stein, General Synthesis of Periodic Macro-porous Solids by Templated Salt Precipitation and Chemical Conversion, Chem. Mater., Vol. 12, pp. 1134-1141, 2000.
Bwt	GE	J. E. G. J. Wijnhoven, W. L. Vos, Preparation of photonic crystals made of air spheres in Titania, Science, Vol. 281, pp. 802-804, 1998.
Bwt	GF	D. J. Norris, Y. A. Vlasov, Chemical Approaches to Three-Dimensional Semiconductor Photonic Crystals, Advanced Materials, Vol. 13, Issue 6, pp. 371-376, 2001.
Bwt	GG	F. J. P. Schuurmans, D. Vanmaekelbergh, J. van de Lagemaat, A. Lagendijk, Strongly Photonic Macroporous Gallium Phosphide Networks." Science Vol. 284, pp. 141-143, 1999.
Bwt	GH	Y. Matsui, M. Ishino, T. Fujita, H. Serizawa, T. Kajiwra, A novel measurement technique of loss and facet reflectivity for semiconductor optical waveguides, SPIE Vol. 651, Integrated Optical Circuit Engineering III, 1986.
Bwt	GI	S. G. Johnson, J. D. Joannopoulos, Block iterative frequency domain method for Maxwell's equations in a plane wave basis, Opt. Express, Vol. 8, 173-190, 2001.
Bwt	GJ	P. M. Bell, J. M. Pendry, I. Martin-Moreno, A. J. Ward, A program for calculating photonic band structures and transmission coefficients of complex structures, comput. Phys. commun., Vol. 85, pp. 306-322, 1995.
Bwt	GK	K. R. Williams, R. S. Muller, Etch rates for micromachining processing, J. Microelectromechanical Systems, Vol. 5, pp. 256-269, 1996.

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HA						

FOREIGN PATENT DOCUMENTS

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HB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Smith	HC	"Photonic Band Engineering in Opals by Growth of Si/Ge Multilayer Shells", by F. Garcia-Santamaria et al., Adv. Mater. 2003, 15, No. 10, pgs. 788-792.
Ant	HD	"Tuning the Properties of Photonic Films from Polymer Beads by Chemistry", by M. Egen et al., Chem. Mater: 2002, 14, pgs. 2176-2183.
Berk	HE	"Synthesis and Characterization of Monodisperse Core-Shell Colloidal Spheres of Zinc Sulfide and Silica", by K. Velikov et al., Langmuir 2001, 17, pgs. 4779-4786.
	HF	
	HG	
	HH	
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	HL	
	HM	
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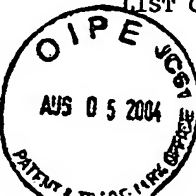
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<i>BMT</i>	AA 2001/0019037	7/2001	Zakhidov et al.	216	56	
<i>BMT</i>	AB 2002/0024163	2/2002	Fu et al.	264	42	
<i>BMT</i>	AC 2002/0045030	4/2002	Ozin et al.	428	173	
<i>BMT</i>	AD 2002/0062782	5/2002	Norris et al.	117	3	
<i>BMT</i>	AE 2002/0126713	9/2002	Ibanescu et al.	372	6	
<i>BMT</i>	AF 2002/0164137	11/2002	Johnson et al.	385	125	
<i>BMT</i>	AG 2002/0173610	11/2002	Aert et al.	526	303.1	
<i>BMT</i>	AH 2002/0176676	11/2002	Johnson et al.	385	125	
<i>BMT</i>	AI 2002/0189947	12/2002	Paul et al.	204	461	
<i>BMT</i>	AJ 2002/0195344	12/2002	Neyer et al.	204	600	
<i>BMT</i>	AK 2003/0008771	1/2003	Fu et al.	502	159	
<i>BMT</i>	AL 2003/0012657	1/2003	Marr et al.	417	48	
<i>BMT</i>	AM 2003/0020399	1/2003	Moller et al.	313	504	
<i>BMT</i>	AN 2003/0021518	1/2003	Smirnov et al.	385	15	
<i>BMT</i>	AO 2004/0013379	1/2004	Johnson et al.	385	125	
<i>BMT</i>	AP 2004/0020423	2/2004	Lewis, III et al.	117	8	
<i>BMT</i>	AQ 2003/0031407	2/2003	Weisberg et al.	385	28	
<i>BMT</i>	AR 2003/0063426	4/2003	Smirnov et al.	361	159	

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Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
BA	2003/0103721	6/2003	Padmanabhan et al.	385	24	
BB	2003/0136946	7/2003	Kumacheva	252	500	
BC	2003/0143081	7/2003	Rakestraw et al.	417	48	
BD	2003/0148088	8/2003	Padmanabhan et al.	428	304.4	
BE	2003/0156319	8/2003	John et al.	359	341.5	
BF	2003/0185505	10/2003	Weisberg et al.	385	28	
BG	2003/0206806	11/2003	Paul et al.	417	48	
BH	2004/0017834	1/2004	Sundar et al.	372	39	
BI	6,139,626	10/2000	Norris et al.	117	68	
BJ	6,228,340	5/2001	Imhof et al.	423	338	
BK	6,261,469	7/20001	Zakhidov et al.	216	56	
BL	6,414,043	7/2002	Asher et al.	521	61	
BM	6,436,187	8/2002	Patel et al.	117	68	
BN	6,517,763	2/2003	Zakhidov et al.	264	344	
BO	6,555,945	4/2003	Baughman et al.	310	300	
BP	6,563,981	5/2003	Weisberg et al.	385	28	
BQ	6,589,629	7/2003	Bao et al.	428	144	
BR	6,625,364	9/2003	Johnson et al.	385	127	

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CA	6,680,013	1/2004	Stein et al.	264	44	
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CA	CD	1 247 820 A1	10/2002	EPO	385	122X	X
CA	CE	1 081 513 A1	3/2001	EPO	385	122X	X
CA	CF	WO 99/01766	1/1999	WIPO	385	122X	X
CA	CG	WO 99/47570	9/1999	WIPO	385	122X	X
CA	CH	WO 00/21905	4/2000	WIPO	385	122X	X
CA	CI	WO 00/50771	8/2000	WIPO	385	122X	X
CA	CJ	WO 01/18283 A1	3/2001	WIPO	385	122X	X
CA	CK	WO 01/55484 A2	8/2001	WIPO	385	122X	X
CA	CL	WO 01/62830 A2	8/2001	WIPO	385	122X	X
CA	CM	WO 01/66833 A1	9/2001	WIPO	385	122X	X
CA	CN	WO 01/96635 A2	12/2001	WIPO	385	122X	X
CA	CO	WO 01/86038 A2	11/2001	WIPO	385	122X	X
CA	CP	WO 02/059656 A2	8/2002	WIPO	385	122X	X
CA	CQ	WO 02/059663 A1	8/2002	WIPO	385	122X	X
CA	CR	WO 02/061467 A2	8/2002	WIPO	385	122X	X
CA	CS	WO 02/091028 A2	11/2002	WIPO	385	122X	X

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CT	
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<i>Sub</i>	DE	WO 02/33461 A2	4/2002	WIPO	385	122X	X
<i>Sub</i>	DF	WO 02/44301 A2	6/2002	WIPO	385	122X	X
<i>Sub</i>	DG	WO 02/101474 A2	12/2002	WIPO	385	122X	X
<i>Sub</i>	DH	WO 03/007663 A1	1/2003	WIPO	385	122X	X
<i>Sub</i>	DI	WO 04/009724 A2	1/2004	WIPO	385	122X	X
<i>Sub</i>	DJ	WO 04/013383 A1	2/2004	WIPO	385	122X	X
	DK						
	DL						
	DM						
	DN						

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<i>Sub</i>	DO	"Optical coupling between monocrystalline colloidal crystals and a planar waveguide", by Y. Zhao et al., <u>APPLIED PHYSICS LETTERS</u> , Vol. 75, No. 23, pgs. 3596-3598, (6 December 1999).
<i>Sub</i>	DP	"Two-dimensional colloidal crystal corrugated waveguides", by Y. Zhao et al., <u>OPTICS LETTERS</u> , Vol. 24, No. 12, pgs. 817-819, (June 15, 1999).
<i>Sub</i>	DQ	"Optical Demultiplexing in a Planar Waveguide with Colloidal Crystal", by I. Avrutsky et al., <u>IEEE PHOTONICS TECHNOLOGY LETTERS</u> , Vol. 12, No. 12, pgs. 1647-1649, (12 December 2000).
EXAMINER: <i>B. Kelly</i>		DATE CONSIDERED: <i>12/2/05</i>

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